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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO | |
|------------------------|-----------------|----------------------|-------------------------|-----------------|--|
| 10/065,169 | 09/24/2002 | Thomas Roehr | 2002P09637US | 4887 | |
| 31366 | 7590 11/06/2003 | | EXAM | EXAMINER | |
| HORIZON IP PTE LTD | | | LUU, PHO M | | |
| 166 KALLA SINGAPORI | | | ART UNIT | PAPER NUMBER | |
| SINGAPORE, 349249 | | | 2824 | | |
| SINGAPORI | E | | DATE MAILED: 11/06/2003 | 3 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|--|--|---|--|--|--|
| | 10/065,169 | ROEHR ET AL. | | | | |
| Office Action Summary | Examin r | Art Unit | _ | | | |
| · | Pho M Luu | 2824 (()) | | | | |
| The MAILING DATE of this communication app Period for Reply | pears on the cover sheet wit | h the corresp ndence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status | 36(a). In no event, however, may a re y within the statutory minimum of thirty will apply and will expire SIX (6) MONTs, cause the application to become ABA | ply be timely filed (30) days will be considered timely. HS from the mailing date of this communication. INDONED (35 U.S.C. § 133). | | | | |
| 1) Responsive to communication(s) filed on | · | · | | | | |
| 2a) This action is FINAL . 2b) ⊠ Th | is action is non-final. | | | | | |
| 3) Since this application is in condition for allows closed in accordance with the practice under Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-17</u> is/are pending in the application | 1. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-6</u> is/are rejected. | | | | | | |
| 7)⊠ Claim(s) <u>7-17</u> is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/o | r election requirement. | | | | | |
| Application Papers | | | | | | |
| 9)⊠ The specification is objected to by the Examine | er. | | | | | |
| 10)⊠ The drawing(s) filed on <u>24 September 2002</u> is/a | are: a)⊡ accepted or b)⊠ ol | jected to by the Examiner. | | | | |
| Applicant may not request that any objection to th | | | | | | |
| 11) The proposed drawing correction filed on | _ is: a)□ approved b)□ di | sapproved by the Examiner. | | | | |
| If approved, corrected drawings are required in re | . • | | | | | |
| 12)☐ The oath or declaration is objected to by the Ex | aminer. | | | | | |
| Pri rity under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign | n priority under 35 U.S.C. § | 119(a)-(d) or (f). | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| Certified copies of the priority document | s have been received. | | | | | |
| 2. Certified copies of the priority document | s have been received in Ap | plication No | | | | |
| 3. Copies of the certified copies of the prio application from the International Bu * See the attached detailed Office action for a list | reau (PCT Rule 17.2(a)). | • | | | | |
| 14) ☐ Acknowledgment is made of a claim for domesti | • | | | | | |
| a) ☐ The translation of the foreign language pro | • | | | | | |
| 15) Acknowledgment is made of a claim for domest | • • | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _ | 5) 🔲 Notice of Ir | ummary (PTO-413) Paper No(s) formal Patent Application (PTO-152) rch History . | | | | |

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DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the content is written, "comprising" and "disclosed". Correction is required. See MPEP § 608.01(b).

Drawings

3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction

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or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Cowles et al. (US. 6,269,035).

Regarding claim 1, Cowles et al (Fig. 1) discloses a redundancy unit (10) comprising a first fuse block (12a) comprising at least one first fuse (14a, and redundant memory 16a, 18a), a second fuse block (12b) comprising at least one second fuse (14b, and redundant memory 16b, 18b) and a redundant element (16a, 18a, 16b, 18b) coupled to the first fuse block (12a) and second fuse block (12b) which is the redundant element can be programmed by either the first or second fuse block (see column 3, lines 3-21).

With respected to claim 2, Cowles et al (Fig. 1) disclosed that the repairs defects in an integrated circuit (see column 5, lines 41-63).

With respected to claim 3, Cowles et al (Fig. 1) disclosed that the redundant element repairs defects in a memory array (see column 5, lines 41-43).

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With respected to claim 4, Cowles et al disclosed that the redundant element comprises a memory cell (14a, 14b).

With respected to claim 5, Cowles et al (Fig. 1) disclosed that the redundant element comprises memory cells for row redundancy (see column 5, lines 44-51).

With respected to claim 6, Cowles et al (Fig. 1) disclosed that the redundant element comprises a memory cells for column redundancy (column 5, lines 41-43).

Allowable Subject Matter

- 6. Claims 7-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 7, the prior art of record do not disclose or suggest the first fuse comprises a laser blowable fuse and the second fuse comprises an electrical fuse.

Regarding claim 16, the prior art of record do not disclose or suggest a selection circuit coupled to between the fuse blocks and redundancy element.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Kirihata et al. (US. 6,166,981) disclosed a redundancy match detection circuit and a means for coupling programmable fuses to the redundancy match detection circuit.

Kwak (US. 6,590,814) disclosed the semiconductor memory device includes an address setting circuit to set a redundant control signal and defect address of each of the memory cell array block.

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Pho M. Luu whose telephone number is 703.306.5943.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Richard Elms, can be reached on 703.308.2816. The official fax number for the organization where this application or proceeding is assigned is 703.872.9306 for all official communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0956.

PML 30 October 2003

VANTHU NGUYEN BATENT EXAMINEN

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